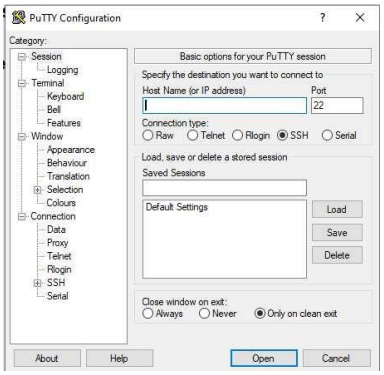
CI/CD: Cloud Computing

To launch the AWS EC2 instance:

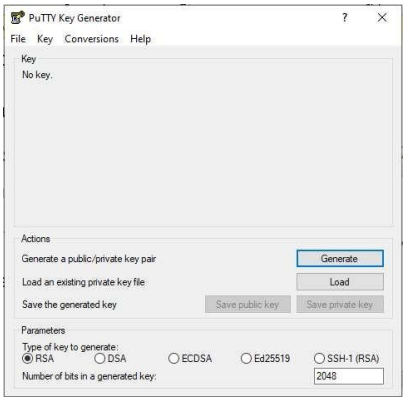
- Open the AWS EC2 console at https://console.aws.amazon.com/ec2/ and enter the required login credentials.
- Choose Launch Instance.
- In Step 1: Choose an Amazon Machine Image (AMI).
- In Step 2: Choose an Instance Type, choose Next: Configure Instance Details.
- In Step 3: Configure Instance Details, provide the following information:
- Leave Number of instances at one.
- Leave Purchasing option at the default setting.
- For Subnet, choose a default subnet in any Availability Zone.
- Choose Next: Add Storage.
- Choose Next: Add Tags.
- Name your instance and choose Next: Configure Security Group.
- In Step 6: Configure Security Group, set Assign a securitygroup to Select an existing security group.
- Choose Review and Launch.
- Choose Launch.
- Select the checkbox to create new key or use existing and Launch instance.

To access it through SSH from your pc over internet:

- Open an SSH client. Let's say PuTTY.



- Locate your private key file. The key used to launch this instance is New-KeyPair.pem
- Generally, the key pair file has to be converted from *.pem* file extension to *.ppk*, this can be donethrough the PuTTYgen.
- Enter the Public IP Address and port number inthe Session Category.



- Now, Enter the path of the converted Key Pair filein the SSH category under the Auth sub-category.
- Then Hit Open.
- Now, Enter the User name in the PuTTY Console,and press enter.
- Now you the instance is accessed through the SSH.

Essentials of AWS EC2:

- Amazon Elastic Compute Cloud (Amazon EC2) is a web service that providessecure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers.

- Amazon EC2's simple web service interface allows you to obtain andconfigure capacity with minimal friction.

- Amazon EC2 presents a true virtual computing environment, allowing you to useweb service interfaces to launch instances with a variety of operating systems, load them with your custom application environment, manage your network's access permissions, and run your image using as many or few systems as you desire.

- Amazon EC2 bare metal instances provide your applications with direct access tothe processor and memory of the underlying server. These instances are ideal forworkloads that require access to hardware feature sets, or for applications that need to run in non-virtualized environments for licensing or support requirements.

- Optimize Compute Performance and Cost with Amazon EC2 Fleet.

- You can hibernate your Amazon EC2 instances backed by Amazon EBS, andresume them from this state at a later time.

- Customers requiring massive floating point processing power will benefit from the next-generation of general-purpose GPU compute instances from AWS, AmazonEC2 P3 instances with up to 8 NVIDIA® V100 Tensor Core GPUs.

- Paying for What You Use You will be charged at the end of each month foryour EC2 resources actually consumed.

- Amazon Machine Images (AMIs) are preconfigured with an ever-growing list ofoperating systems.